

PATENT COOPERATION TRE

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference DX0743X	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US 98/ 12236	International filing date (day/month/year) 18/06/1998	(Earliest) Priority Date (day/month/year) 19/06/1997

Applicant

SCHERING CORPORATION

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Certain claims were found unsearchable(see Box I).
2. Unity of invention is lacking(see Box II).
3. The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing
 - filed with the international application.
 - furnished by the applicant separately from the international application,
 - but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.
 - Transcribed by this Authority
4. With regard to the title, the text is approved as submitted by the applicant
 - the text has been established by this Authority to read as follows:
5. With regard to the abstract,
 - the text is approved as submitted by the applicant
 - the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.
6. The figure of the drawings to be published with the abstract is:
Figure No. _____
 - as suggested by the applicant.
 - because the applicant failed to suggest a figure.
 - because this figure better characterizes the invention.
 - None of the figures.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 98/12236

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:

because they relate to subject matter not required to be searched by this Authority, namely:

Remark: Although claims 9 and 18, as far as in vivo methods are concerned, are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

2. Claims Nos.: 18

because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

Claim 18 relating to a method of modulating physiology or development of the cell using agonist and/or antagonist of C2, C2b, C18, C19 or C23 could only be searched partially, as the subject matter (agonist/antagonist) was not sufficiently disclosed.

3. Claims Nos.:

because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking(Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 98/12236

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C12N15/12 C07K14/47 C07K16/18 C12Q1/68 G01N33/577

According to International Patent Classification(IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 C12N C07K C12Q G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	M. MARRA ET AL.: "The WashU-HHMI Mouse EST Project" EMBL SEQUENCE DATABASE, 29 March 1997, XP002078354 Heidelberg, FRG vb70e06.r1 Barstead mouse pooled organs MPLRB4 Mus musculus cDNA clone 762370 5'; Accession no. AA273994; ---	11-13,17
X	M. MARRA ET AL.: "The WashU-HHMI EST Project" EMBL SEQUENCE DATABASE, 12 March 1997, XP002078355 Heidelberg, FRG my52f08.r1 Barstead mouse pooled organs MPLRB4 Mus musculus cDNA clone 699495 5'; Accession no. AA245405 5'; ---	11-13,17

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

23 September 1998

01/10/1998

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INT'L INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/12236

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	M. MARRA ET AL.: "The WashU-HHMI Mouse EST Project" EMBL SEQUENCE DATABASE, 20 May 1997, XP002078356 Heidelberg, FRG ve76b03.r1 Soares mouse mammary gland NbMMG Mus musculus cDNA clone 832109 5'; Accession no. AA423511; ----	11-13, 17
X	M. MARRA ET AL.: "The WashU-HHMI Mouse EST Project" EMBL SEQUENCE DATABASE, 14 June 1997, XP002078357 Heidelberg, FRG ve01d11.r1 Soares mouse NbMH Mus musculus cDNA clone 808821 5'; Accession no. AA467519;	11-13, 17
X	M.D. ADAMS ET AL.: "Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequences" EMBL SEQUENCE DATABASE, 18 April 1997, XP002078358 Heidelberg, FRG & NATURE, vol. 377, 1995, pages 3-174, MACMILLAN JOURNALS LTD., LONDON, UK -----	11-13, 17